and in adult, pigeons usual dosages of prolactin are continued during about 4 to 6 days before the secretion of crop-milk begins. The tabulated data show that under small or moderate dosage (2 to 12 units daily) these very young hypophysectomized birds may begin crop-milk secretion within as little as 5 days, and they may also secrete at least as late as the 38th day. The effect of long-continued or of excessive stimulation of the crop-sacs of either normal or hypophysectomized pigeons is otherwise quite unknown.

Summary. In all of 20 pigeons completely hypophysectomized from 1 to 287 days earlier the crop-sacs were stimulated by prolactin to proliferation, and often to crop-milk formation within 4 days. These complete responses were obtained in both very immature and in adult individuals. Quantitative measurements made on the operated adults show, however, that their crop-sac response is only about one-eighth that of unoperated mature pigeons.

Complete adrenalectomy did not prevent the usual response of the crop-sacs to prolactin in a test started 4 days after operation. Thyroidectomy did not significantly affect the usual crop-sac response to prolactin in a pigeon operated 176 days earlier.

9250

Erythrocyte Count in Four Inbred Strains of Mice.

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Since wide variation in the erythrocyte count for adult mice *(Mus musculus)* appears in the literature, the problem of whether this variation is genetic arose. It also seemed desirable to establish a mean red cell count on a more adequate number of animals than usually reported.

The figures given by various authors for erythrocyte counts (in millions per cu. mm.) are as follows: Simmonds,[1] 6 to 8; Mixter and Hunt,[2] 9.7 for "non-flexed" based on 12 animals and 11.2 for "flexed" based on 16 animals; Kamenoff,[3] 9.9 for "non-flexed" based on 13 and 10.9 for "flexed" based on 5. The following figures are summarized from Scarborough[4] (in millions per cu. mm.):

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1 Simmonds, J. P., *Anat. Record,* 1925, **30**, 99.

2 Mixter, R., and Hunt, H. R., *Genetics,* 1933, **18**, 367.

3 Kamenoff, R. J., *J. Morph.,* 1935, **58**, 117.

4 Scarborough, R. A., *Yale J. Biol. and Med.,* 1930, **3**, 272.

Author	Aver.	Maximum	Minimum	No. of animals
Goodall[5]	10.9	—	—	—
Klienenberger and Carl[6]	9.7	11.0	7.7	8
Klienenberger and Carl[6]	10.7	12.4	8.9	8
Lange[7]	9.3	—	—	—
Meyer[8]	8.3	—	—	—
Sundstroem[9]	10.1	—	—	10
Scarborough's average of these figures	9.7			

The work here reported was done in the laboratory of Dr. E. C. MacDowell of the Department of Genetics of the Carnegie Institution of Washington for which the author wishes to thank Dr. MacDowell, as well as for the use of his inbred mice strains.

The blood counts were made on samples of blood drawn from the tip of the tail and diluted 2, 3, or 4 to 1,000. Usually 2 counts were made from a single sample from each mouse. The mice were adult breeding stock in good condition and from 6 weeks to one year old. They were from 4 of the highly inbred strains maintained at the Carnegie Institution laboratory in Cold Spring Harbor. Each strain had been brother-sister inbred for over 30 generations, and were thus highly homozygous. The strains used were, first, an albino strain known as Bagg Albino (B. Alb.); second, a dilute brown strain (d. br.); third, a black strain known as C 58 (the strain used extensively by Dr. MacDowell in his leukemia work); and fourth, a pink eye dilute brown strain known as Storrs-Little (Sto-Li).

In Table I the mean, with its standard error, of each of the lines is given as well as the number of animals on which each figure is based. There is practically no difference between the means of the 4 strains. However, in all the strains the mean red count of the males is higher than that of the females, although possibly not significantly so in the C 58's. The mean for all males together, irrespective of strain, is 10,019,400 ± 68,900 and of the females 9,225,000 ± 46,700 with a difference of 794,431 ± 83,300, a significant difference. The mean for all 118 animals, irrespective of sex and strain, is 9,552,000 ± 58,700.

In Table II the red cell count for the extreme individual of each sex of each strain is given. Although the range in each strain is

[5] Goodall, A., *J. Path. and Bact.*, 1910, **14**, 195.

[6] Klienenberger, C., and Carl, W., *Die Blut-Morphologie der Laboratoriums-Tiere*, Leipzig, 1912.

[7] Lange, *Zool. Jahrb.*, 1919, **36**, 657.

[8] Meyer, S., *Folia hematol.*, 1924, **30**, 195.

[9] Sundstroem, E. S., *Am. J. Physiol.*, 1922, **60**, 443.

TABLE I.
Mean Erythrocyte Count of Several Strains (in corpuscles per cu. mm.)

Strain	No. of animals	Unweighted mean	Standard error	Weighted mean	No. of males	Mean of males	No. of females	Mean of females
B. Alb.	42	9,531,700	158,000	9,665,900	16	10,229,500	26	9,102,300
C 58	25	9,498,000	216,000	9,502,800	7	9,514,000	18	9,491,600
Sto-Li	26	9,515,400	233,000	9,563,800	11	9,881,000	15	9,246,600
d. br.	25	9,532,700	220,000	9,641,900	10	10,187,900	15	9,096,000
All	118	9,522,100	58,700	9,623,200	44	10,019,400	74	9,225,000

Unweighted mean is the mean based on all the animals of a given strain irrespective of sex.
Weighted mean is the mean obtained by giving equal weight to each sex irrespective of the number of individuals of each sex used.

TABLE II.
Extreme Erythrocyte Count in Several Strains (in corpuscles per cu.mm.).

Strain	High		Low	
	male	female	male	female
B. Alb.	11,893,000	10,660,000	8,580,000	7,455,000
C 58	10,110,000	11,657,000	9,013,000	6,693,000
Sto-Li	11,613,000	11,187,000	8,625,000	6,696,000
d. br.	11,507,000	10,487,000	8,608,000	7,600,000

extremely wide, the ranges of the different strains do not differ materially.

From these data, therefore, it must be concluded that these 4 strains do not have an inherited difference in the number of erythrocytes; and, since highly homozygous stock was used, the variations within each strain are not genetic but extrinsic in origin. Further, the average erythrocyte count of 9,700,000 per cu. mm. given in Scarborough, based on the work of 5 separate authors on an assumed total of 48 animals, does not differ widely from the count of 9,550,000 per cu. mm. based on 118 animals in this study.

9251

Experimental Fever Therapy in Myxomatosis and Fibroma of Rabbits.*

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We have recently attempted to test the effect of induced fever on the development of myxomatosis and fibroma in rabbits. There are a large number of fever machines[1] in use in clinics and in offices of practicing physicians, and the subject of fever therapy in various pathological conditions is growing rapidly in importance. In some of these, notably in the acute pelvic inflammation due to *Neisseria gonorrhϾ*, the treatment has proved its efficiency and worth. In other conditions fever therapy is employed experimentally, or empirically, as in the case of arthritis. Clinical results are good, bad, and indifferent, depending upon the individual patient and his dis-

* Appreciation is expressed to the General Electric X-Ray Corporation for its courtesy in supplying us its Inductotherm for experimental use.

1 Krusen, Frank H., *J. Am. Med. Assn.*, 1936, **107**, 1215.